

SUBJECT: AIRS Usage

AZ POST
DESIGNATION: Instructor/Basic

HOURS: **Instructor – 1 Continuing – 1**

COURSE
CONTENT: Lecture material covering the usage of the AIRS radio system for interoperability with other public safety agencies and non-governmental organizations.

PERFORMANCE
OBJECTIVES: Upon completion of this course of instruction, students using notes, handouts and other support materials as references, within the allotted time, will:

- A. Identify when AIRS is to be used.
- B. Demonstrate how to select the right channel.
- C. Demonstrate understanding of plain English requirement.
- D. Demonstrate understanding of requirement to use agency affiliation and title.
- E. Demonstrate knowledge of system's known limitations.
- F. Demonstrate knowledge of the regional monitoring and dispatching capabilities.
- G. Identify who to notify in their agency if there is a problem.

DATE FIRST PREPARED: February 2010

PREPARED BY: AZ Public Safety Interoperable Communications Office

REVIEWED – REVISED: DATE:

REVIEWED – REVISED: DATE:

REVIEWED – REVISED: DATE:

REVIEWED – REVISED: DATE:

REVIEWED – REVISED: DATE:

REVIEWED – REVISED: DATE:

AZ POST – APPROVAL: DATE:

INSTRUCTOR REFERENCES:

CLASS LEVEL: Recruit/Continuing

TRAINING AIDS: PowerPoint, DVD player, projector, handouts.

INSTRUCTIONAL STRATEGY: Interactive lecture and class discussion.

SUCCESS CRITERIA: 70% or higher on a written, multiple-choice examination.

COMPUTER FILE NAME: AIRS Usage

II. INTRODUCTION

- A. Instructor – (self) introduction.
- B. Preview of performance objectives.
- C. AIRS is a suite of full-time, cross-banded (i.e. VHF, UHF, and 800 MHz) mutual aid channels designated specifically for multi-agency use across the State of Arizona.

III. DEFINITIONS

- A. AIRS - Arizona Interagency Radio System, formerly referred to as the Interagency Radio System (IARS) or as the Arizona Emergency Radio System (AERS)
- B. AIRSAZ - Arizona Interagency Radio System - Arizona
- C. ARRC - The 800 MHz National Public Safety Planning Advisory Committee (NPSPAC) Arizona Regional Review Committee
- D. CAD - Computer Aided Dispatch
- E. COML - Communications Unit Leader
- F. CTCSS - Continuous Tone-coded Squelch System, also known as "PL", a sub-audible tone used in radio systems to control radio access
- G. DPS - Department of Public Safety
- H. EMS - Emergency Medical Services
- I. FCC - Federal Communications Commission
- J. Freq - Frequency
- K. IC - Incident Command
- L. ICS - Incident Command System
- M. ID - Identification
- N. MOU - Memorandum of Understanding
- O. NCC - National Coordination Committee

- P. NGO - Non-governmental Organization
- Q. NIMS - National Incident Management System
- R. NOC - Arizona Department of Public Safety, Wireless Systems Bureau, Network Operations Center
- S. NPSTC - National Public Safety Telecommunications Council
- T. PL - Private Line
- U. POC - Point of Contact
- V. PSAP - Public Safety Answering Point
- W. PSCC - The Public Safety Communications Advisory Commission provides recommendations to the PSIC Office on the development of standards based systems providing interoperability for public safety agencies' communications statewide
- X. PSIC Office - Public Safety Interoperable Communications Office in the Arizona Government Information Technology Agency responsible for advancing interoperable communication in Arizona and supporting the PSCC and the SIEC in the performance of their missions.
- Y. SIEC - The Statewide Interoperability Executive Committee is the sub-committee of the PSCC responsible for technical and operational recommendations to the PSCC. The SIEC manages the 700 MHz, UHF and VHF spectrums, and has operational oversight of AIRS.
- Z. SOP - Standard Operating Procedure
- AA. Voter - A device that selects the best quality audio from a number of received signals and routes the selected "voted" audio to a dispatcher.
- BB. WSB - Arizona Department of Public Safety, Wireless Systems Bureau which has engineering and maintenance responsibility for AIRS.

IV. WHEN TO USE AIRS:

- A. AIRS channels are reserved for situations that require interoperable communications to coordinate multiple public safety/public service entities and/or activities across two or more separate radio systems.

- B. AIRS Usage is prioritized based on:
 - 1. Disasters, large scale incidents, or extreme emergencies requiring mutual aid or interagency communications.
 - 2. Incidents where imminent danger exists to life or property.
 - 3. Other incidents requiring the response of multiple agencies.
 - 4. Pre-planned events requiring mutual aid or interagency communications.
 - 5. Incidents involving a single agency where supplemental communications are needed for short term agency use.
 - 6. Drills, tests and exercises.
- C. In the event of multiple simultaneous incidents within the same priority level, AIRS channels should be allocated with the following priorities in mind:
 - 1. When at all possible, agencies already using an interoperable asset during an event should not be redirected to another resource.
 - 2. Agencies with single/limited interoperable options have priority use of those options over agencies with multiple interoperable options.
 - 3. Incidents with the greatest level of exigency (e.g., greater threat to life or property, more immediate need) have priority over less exigent incidents.

V. HOW TO SELECT THE RIGHT AIRS CHANNEL

- A. See the assignment map in handout or in Appendix A.1 of the AIRS SOP.
- B. Assignments are drawn on county lines, but coverage may extend beyond those artificial limits.

VI. PLAIN ENGLISH REQUIREMENT

- A. No coded substitutions may be used on AIRS. 10-Codes, CAD codes, disposition codes, etc.

- B. This is because the system is for multi-agency communications, and codes vary between agencies.

VII. REQUIREMENT TO ANNOUNCE AGENCY AND TITLE

- A. All users must announce their agency and title when using AIRS. Examples:
 - 1. “MCSO T544”
 - 2. “SouthWest Ambulance 172”
 - 3. “Tolleson Engine 191”
 - 4. “Southwest Gas ...”

VIII. SYSTEM LIMITATIONS

- A. Coverage. See AIRS SOP Appendix.
 - 1. The AIRS Regional Channel Assignment Map (see AIRS SOP Appendix) is intended to show assignment of AIRS Channels and should not be interpreted as showing that coverage is available throughout the region and follows along county lines. Users must see the County Maps following the Regional Map to help determine actual availability of coverage and identify gaps in coverage.
 - 2. The County Maps show composite radio coverage aggregated from all individual single site coverage estimates in the county. This aggregated coverage is mapped in a single color as the top layer on the County Map. The assigned regional AIRS channel shown on the AIRS Regional Channel Assignment Map is generally available throughout most of the aggregated coverage area shown on the County Map.
 - 3. There may be additional AIRS coverage from an adjacent county that is not visible on the County Map. That coverage can be identified on the County Map for the adjacent region where it is mapped as the top layer. In areas where coverage from more than one region overlaps, user need to become familiar with both coverage areas to understand which AIRS

Channels and monitoring agencies may be active. Users risk losing their monitoring and dispatching support when they move to an overlapping channel because that channel has a different CTCSS (PL) tone.

- B. Non-voted towers and voted towers not monitored. See AIRS SOP Appendix.
- C. Not encrypted.
- D. Monitoring. See AIRS SOP Appendix.
- E. Communication. AIRS makes use of conventional repeaters. Therefore, monitoring communication centers can communicate with users throughout the regional coverage area. However, user to user communication is possible only between users having coverage from a common tower within the region.

IX. REGIONAL MONITORING AND DISPATCH CAPABILITIES

- A. See handouts or AIRS SOP Appendix.

X. WHO TO NOTIFY IF THERE IS A PROBLEM

- A. During an incident:
 - 1. Primary agency dispatcher or COML.
 - 2. DPS Wireless Services Bureau NOC. (602) 223-2245.
 - 3. Move the incident off of AIRS channels if the issue cannot be resolved satisfactorily.
- B. Non-emergency and after incident issues.
 - 1. Personnel for the agency initiating the call for service, incident command staff, and/or the incident COML can report any technical and maintenance problems with AIRS to the DPS WSB NOC.
 - 2. The DPS WSB NOC can be reached via email at WSB_NOC@AZDPS.GOV. Include as much information about the nature of the problem as possible, such as the number of users, what

location(s), which frequency (band), and any other defining characteristics.

- C. Oversight issues and unresolved AIRS problems:
 - 1. Report oversight issues and unresolved AIRS problems to the SIEC via the PSIC Office. The SIEC will discuss reported AIRS issues/problems and recommend an action plan.
 - 2. Reports may be submitted electronically to siec@azgita.gov or in writing to the PSIC Office, Government Information Technology Agency located at 100 N 15th Avenue, Suite 440, Phoenix, AZ 85007. The PSIC Office will agendaize the oversight issue or unresolved problem report for the SIEC.

XI. CONCLUSION

- A. Review of performance objectives.
- B. Final questions and answers.
- C. Instructor closing comment(s).